Amendments to the Claims

Listing of Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A composition comprising, a nonionic block copolymer, wherein the block copolymer has the following formula:

$$HO(C_2H_4O)_b(C_3H_6O)_a(C_2H_4O)_bH$$

wherein "a" is a number such that the molecular weight of the hydrophobe $(C_3H_6O)_a$, represented by the polyoxypropylene portion of the copolymer, is between approximately 750 and 15,000 Daltons; and "b" is a number such that the hydrophile $(C_2H_4O)_b$ portions of the block copolymer, represented by the polyoxyethylene portions of the block copolymer, together are approximately 1% to approximately 50% of the total weight of the block copolymer, and

one or more nucleic acid molecules selected from the group consisting of: oligonucleotides, antisense oligonucleotides, triplex DNA compounds, ribozymes, and mixtures thereof;

wherein the composition further comprises an antimicrobial drug selected from the group consisting of; rifampin, isoniazid, ethambutol, gentamicin, tetracycline, erythromycin, pyrazinamide, streptomycin, clofazimine, rifabutin, fluoroquninolones, azithromycin, clarithromycin, dapsone, doxycyline, ciprofloxacin, ampicillin, amphotericin B, fluconazole, ketoconazole, pyrimethamine, sulfadiazine, clindamycin, paromycin, diclazaril, atovaquone, pentamidine, acyclovir, trifluorouridine, AZT, DDI, DDC, forscarnet, viral protease inhibitors, ganciclovir, ribavirin, antiviral nucleoside analogs, and a combination thereof.

2-21 (Cancelled).

22. (Previously Presented) A method of delivering a molecule to an animal, comprising administering to the animal a composition comprising a nonionic block copolymer, wherein the block copolymer has the following formula:

$$HO(C_2H_4O)_b(C_3H_6O)_a(C_2H_4O)_bH$$

wherein "a" is a number such that the molecular weight of the hydrophobe $(C_3H_6O)_a$, represented by the polyoxypropylene portion of the copolymer, is between approximately 750 and 15,000 Daltons; and "b" is a number such that the hydrophile $(C_2H_4O)_b$ portions of the block copolymer, represented by the polyoxyethylene portions of the block copolymer, together are approximately 1% to approximately 50% of the total weight of the block copolymer,

wherein the nonionic block copolymer facilitates entry of the molecule into a cell, and

one or more nucleic acid molecules selected from the group consisting of: oligonucleotides, antisense oligonucleotides, triplex DNA compounds, ribozymes, and mixtures thereof;

wherein the one or more nucleic acid molecules are used for hybridization with one or more targeted RNA messages of a cell or virus.

23. (Currently Amended) A method of delivering a molecule to an animal, comprising administering to the animal a composition comprising a nonionic block copolymer, wherein the block copolymer has the following formula:

$$HO(C_2H_4O)_b(C_3H_6O)_a(C_2H_4O)_bH$$

wherein "a" is a number such that the molecular weight of the hydrophobe $(C_3H_6O)_a$, represented by the polyoxypropylene portion of the copolymer, is between approximately 750 and 15,000 Daltons; and "b" is a number such that the hydrophile $(C_2H_4O)_b$ portions of the block copolymer, represented by the polyoxyethylene portions of the block copolymer, together are approximately 1% to approximately 50% of the total weight of the block copolymer,

wherein the nonionic block copolymer facilitates entry of the molecule into a cell, and

one or more nucleic acid molecules selected from the group consisting of: genes, oligonucleotides, antisense oligonucleotides, triplex DNA compounds, ribozymes, and mixtures thereof;

wherein the one or more nucleic acid molecules are used for supplying to an animal with a defective copy of one of its genes a normal copy of that gene; and,

wherein the one or more nucleic acid molecules encodes a normal copy of the gene.

24-36. (Cancelled).

37. (Previously Presented) A method for immunizing an animal against a particular gene product comprising administering to an animal a composition comprising a nonionic block copolymer, wherein the block copolymer has the following formula:

$$HO(C_2H_4O)_b(C_3H_6O)_a(C_2H_4O)_bH$$

wherein "a" is a number such that the molecular weight of the hydrophobe $(C_3H_6O)_a$, represented by the polyoxypropylene portion of the copolymer, is between approximately 750 and 15,000 Daltons; and "b" is a number such that the hydrophile $(C_2H_4O)_b$ portions of the block copolymer, represented by the polyoxyethylene portions of the block copolymer, together are approximately 1% to approximately 50% of the total weight of the block copolymer,

an expression vector, wherein the expression vector contains a gene that codes for the gene product to be immunized against;

and wherein the composition further comprises approximately 0.1% to approximately 5% by weight of a surfactant.

38. (Previously Presented) The method of claim 37, further comprising approximately 0.5% to approximately 5% by volume of a low molecular weight alcohol.

39-42. (Cancelled).